ABSTRACT OF THE DISCLOSURE

A wireless communication apparatus and method is provided which makes discrete functional elements perform a cooperative work without various limitations caused by a wired configuration. The wireless communication apparatus has a plurality of fine functional elements 3 each having a communication unit for data transmission and reception by using radio 10 waves or light and one or more unit other than the communication unit, and a base station 4 for controlling and collectively managing the fine functional elements through communications with the fine functional elements, wherein one or more 15 units other than the communication unit are activated through communications of one of the fine functional elements 3 received control information from the base station 4 with another of the fine functional elements 3 via the 20 communication units, to thereby make the discrete functional elements 3 perform a cooperative work.